General

Guideline Title

Follow-up care, surveillance protocol, and secondary prevention measures for survivors of colorectal cancer.

Bibliographic Source(s)

Earle C, Annis R, Sussman J, Haynes AE, Vafaei A. Follow-up care, surveillance protocol, and secondary prevention measures for survivors of colorectal cancer. Toronto (ON): Cancer Care Ontario (CCO); 2012 Feb 3. 66 p. (Evidence-based series; no. 26-2). [50 references]

Guideline Status

This is the current release of the guideline.

The EVIDENCE-BASED SERIES report, initially the full original Guideline, over time will expand to contain new information emerging from their reviewing and updating activities.

Please visit the Cancer Care Ontario Web site for details on any new evidence that has emerged and implications to the guidelines.

Recommendations

Major Recommendations

Which Evaluations Should Be Performed for Colorectal Cancer (CRC) Survivors for Surveillance for Recurrence of Cancer?

How Often Should CRC Survivors Undergo Evaluation for Surveillance?

- A medical history and physical examination along with the carcinoembryonic antigen (CEA) laboratory test should be performed every six months for five years.
- Abdominal and chest computed tomography (CT) scans are recommended annually for three years. A pelvic CT scan is also recommended on the same schedule if the primary tumour was located in the rectum.
- A surveillance colonoscopy should be performed approximately one year after the initial surgery. The frequency of subsequent surveillance colonoscopies should be dictated by the findings of the previous one, but they generally should be performed every five years if the findings of the previous one are normal.

Table 1. Recommended Evaluations and Intervals for Routine Surveillance of CRC Cancer Survivors.

Evaluation	Recommendation	Recommended Frequency	Under-use*	Over-use*

Evaluation	Recommendation	Recommended Frequency	~~Under-use*~~	~~Over-use*~~
Physical examination, history, and carcinoembryonic antigen (CEA)	A medical history and physical examination along with the laboratory test of CEA should be performed.	Every 6 months for 5 years.	Years 1 – 5: <1 within 12 months	Years 1 – 5: >4 CEAs within 12 months 5+ Years: >0
Abdominal imaging	Abdominal computed tomography (CT) scanning is recommended.	Annually for 3 years.	Years 1 – 3: <1 CT within 12 months *Or*, <1 ultrasound (U/S) within 12 months	Years 1 – 5: >2 CTs within 12 months *Or*, >4 U/S within 12 months 5+ Years: >0
Pelvic imaging	Pelvic CT scan is recommended if the primary tumour was located in the rectum.	Annually for 3 years.	Years 1 – 3: <1 CT within 12 months	Years 1 – 5: >2 CTs within 12 months *Or*, >0 if not pelvic 5+ Years: >0
Chest imaging	Chest CT scanning is recommended.	Annually for 3 years.	Years 1 – 3: <1 CT within 12 months *Or* <1 chest x-ray (CXR) within 12 months	Years 1 – 5: >2 CTs within 12 months *Or* >4 CXRs within 12 months 5+ Years: >0
Colonoscopy	Surveillance colonoscopy is recommended.[A]	At 1 year following surgery; the frequency of subsequent surveillance colonoscopies should be dictated by the findings of	<1 within 3 years,	>1 per year

Evaluation	Recommendation	Recommended Frequency	Under-use*	Over-use*
		the previous one, but generally should be performed every 5 years, if the findings of the previous one are normal.	then <1 every 5 years	

[A] Patients with rectal cancer who have not received pelvic radiation should receive a rectosigmoidoscopy every 6 months for 2-5 years.

*Measured from completion of primary therapy, i.e., the end of adjuvant treatment if given, or surgery when no adjuvant treatment is given, and with +/- 3 month leeway.

Which Symptoms/Signs Potentially Signify a Recurrence of CRC and Warrant Investigation?

In the expert opinion of the authors, any new and persistent or worsening symptom warrants the consideration of a recurrence, especially:

- Abdominal pain, particularly in the right upper quadrant or flank (liver area)
- Dry cough
- Vague constitutional symptoms such as:
  - Fatigue
  - Nausea
- Unexplained weight loss
- Signs and/or symptoms specific to rectal cancer:
  - Pelvic pain
  - Sciatica
  - Difficulty with urination or defecation
- There are no signs of symptoms specific to colon cancer that would not also apply to rectal cancer.
- Table 2 in the original guideline document provides an estimate of the percentage of patients with recurrence at five years by site of recurrence.

What Are the Common and/or Significant Long-term and Late Effects of CRC Treatment?

In the expert opinion of the authors, common long-term or late effects of treatment for CRC may include the following:

- *General*
  - Fatigue
  - Distress (e.g., anxiety, depression)
- *Related to surgery*
  - Frequent and/or urgent bowel movements or loose bowels—often improves over first few years
  - Gas and/or bloating
  - Incisional hernia
  - Increased risk of bowel obstruction
  - In patients who received ostomy—lifestyle adjustment will be required.
- *Related to medication*
  - Peripheral neuropathy (associated with treatment using oxaliplatin)
  - "Chemo-brain," including difficulty with short-term memory and the ability to concentrate
- *Related to radiation*
  - Localized skin changes (i.e., colour, texture, and loss of hair)
  - Rectal ulceration and/or bleeding (radiation colitis)
  - Anal dysfunction (incontinence)
  - Bowel obstruction (from unintended small bowel scarring)
  - Infertility
  - Sexuality dysfunction (e.g., vaginal dryness, erectile dysfunction, retrograde ejaculation)
  - Second primary cancers in the radiation field (typically about seven years after radiotherapy)
  - Bone fracture (e.g., sacral region)

On What Secondary Prevention Measures Should CRC Survivors Be Counselled?

Despite the lack of high-quality evidence on secondary prevention in CRC survivors, the following counselling goals would be reasonable based on lower levels of evidence and the expert opinion of the authors:

- Maintain an ideal body weight.

- Engage in a physically active lifestyle.
- Eat a healthy diet.
- There are insufficient data to make a firm recommendation regarding the role of acetylsalicylic acid (ASA) in the secondary prevention of CRC.

Is There a Preferred Model of Follow-up Care in Ontario?

The most common practice for follow-up care in Ontario involves specialist-coordinated care within an institution. Emerging evidence suggests that, for CRC cancer survivors who have completed all their treatment, discharge from specialist-led care to community-based family physician-coordinated or institution-based nurse-coordinated care is a reasonable option.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Colorectal cancer (CRC)

Guideline Category

Counseling

Evaluation

Management

Prevention

Clinical Specialty

Colon and Rectal Surgery

Family Practice

Gastroenterology

Internal Medicine

Nursing

Oncology

Radiation Oncology

Radiology

Intended Users

Advanced Practice Nurses

Health Care Providers

Health Plans

Hospitals

Managed Care Organizations

Nurses

Patients

Physician Assistants

Physicians

Guideline Objective(s)

To create a reasonable, specific follow-up protocol for survivors of colorectal cancer (CRC), with two purposes: (i) to facilitate different models of survivorship care by having a guidance document with which any clinician (e.g., non-specialist physician, advanced practice nurse) would be able to provide follow-up care to survivors of CRC and (ii) to allow standards for overuse and underuse to be developed, against which practice could be measured and reported

Target Population

Colorectal cancer (CRC) survivors: adult patients who have completed primary treatment for stage II or III disease and are without evidence of disease

Note: Whether these recommendations are extrapolated to stage I patients is left to the discretion of the healthcare provider.

Interventions and Practices Considered

1. Evaluations for recurrence and surveillance
    - Physical examination
    - History
    - Carcinoembryonic antigen (CEA) laboratory test
    - Abdominal (pelvic) and chest computed tomography (CT) scan
    - Abdominal ultrasound as substitute for CT scan
    - Chest x-ray as substitute for chest CT
    - Surveillance colonoscopy
    - Complete blood count and other routine blood work (not recommended)
    - Fecal occult blood test (not recommended)
2. Frequency of evaluations for recurrence and surveillance
3. Monitoring of symptoms and signs for recurrence of colorectal cancer (CRC)
4. Monitoring of long-term or late effects of treatment
5. Counselling patients on prevention measures
    - Maintaining ideal body weight
    - Physically active lifestyle
    - Healthy diet
    - Acetylsalicylic acid (ASA) (insufficient data to make firm recommendation)
6. Models of follow-up care (specialist-led, community-based family physician-coordinated, or institution-based nurse-coordinated care)

Major Outcomes Considered

- Recurrence rates
- Frequency and type of surveillance evaluations
- Long-term and late effects of colorectal cancer (CRC) treatment

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Literature Search Strategy

For research questions 1-5, the literature search involved an Internet search for guidelines relevant to the research questions, using the Program in Evidence-base Care (PEBC) preferred list (Table 1 in the original guideline document) of guideline developers and guideline directories of Canadian and international health organizations and the National Guideline Clearinghouse. The intent of this search was to create a comprehensive list of all existing guidelines, based on evidence relevant to the project. These web sites/databases were searched from 2000 through June 2011 using the following keywords: "colorectal cancer", "surveillance", "follow up", "survival", "survivor", "recurrence", "preventive", "prevention", and "late effects". In addition, MEDLINE and EMBASE databases, along with the Cochrane Database of Systematic Reviews (CDSR), were also searched from 2000 through June 2011 using the same keywords. Appendix 2 in the original guideline document details the literature search strategies used in MEDLINE and EMBASE, and a similar search strategy was used in the CDSR.

For research question 6, studies were pulled from the PEBC's Evidence-based Series (EBS) 26-1: Models of Care for Cancer Survivorship guideline. This systematic review used OVID to search the MEDLINE (R) and EMBASE databases for articles assessing the impact of model(s) of care for post-treatment cancer survivors, published between 2000 and week 13 of 2012. Key terms were purposely broad and included: "cancer", "survivor", "follow-up care" and "after care", with a subsequent randomized controlled trial (RCT) and systematic review filter. In addition, reference lists of primary articles were scanned for potentially useful studies, and selected journals were hand-searched (e.g., Journal of Cancer Survivorship).

Study Selection Criteria

Articles were selected for inclusion in this systematic review, if they were:

- Evidence-based clinical practice guidelines providing guidance on follow-up and/or surveillance procedures, signs and symptoms of recurrence, late and/or long-term adverse effects of treatment, or secondary prevention measures in adult survivors of colorectal cancer (CRC) (patients who had a primary diagnosis of CRC, completed treatment, and show no symptoms of recurrence or development of metastases); or,
- Systematic reviews and meta-analyses investigating the signs and symptoms of recurrence, late and long-term adverse effects of treatment, or secondary prevention measures for adult survivors of CRC (as defined previously).

On a question by question basis, if current and high-quality clinical practice guidelines were identified, they would be included and the evidentiary bases from those guidelines used to inform the relevant questions. In addition, systematic reviews and meta-analyses would not be selected in the primary literature search. A priori, the Working Group was aware that several high-quality guidelines existed that would inform Questions 1 and 2. In the event that clinical practice guidelines, systematic reviews, and meta-analyses were not identified to inform Questions 3 (signs and symptoms of CRC recurrence), 4 (common and significant late or long-term effects of CRC treatment), and 5 (secondary prevention measures for CRC), the Group would develop recommendations based on expert clinical opinion and consensus. As lower quality observational studies were likely to form the evidence base that would inform those questions, the Group agreed that an extensive and exhaustive literature search for such studies should not be conducted as they would not contribute to the development of definitive recommendations.

Exclusion Criteria

Non-English guidelines were excluded, as translation funding was not available.

Number of Source Documents

In total, 11 clinical practice guidelines were identified and included. Three additional publications reported the details of three unique systematic reviews.

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus (Committee)

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Synthesizing the Evidence

Data on the recommended follow-up and surveillance procedures for colorectal cancer (CRC) survivors were extracted. New recommendations were adapted from the included guidelines, and a set of recommendations were drafted by the methodologist. The Working Group reviewed each recommendation separately, assessed the acceptability and applicability of the recommendations for the Ontario context, and modified them accordingly.

Quality Appraisal of Clinical Practice Guidelines and Systematic Reviews

The Appraisal of Guidelines for Research and Evaluation (AGREE II) Instrument was applied to any clinical practice guidelines that met the inclusion criteria. The AGREE II Instrument evaluates the process of practice guideline development and the quality of reporting. The Standards and Guidelines Evidence (SAGE) Inventory of Cancer Guidelines was searched for a record of each included guideline, because AGREE II evaluations are conducted and reported for all guidelines in the inventory. The Inventory of Cancer Guidelines is a searchable database of over 1100 English language cancer control guidelines and standards released since 2003, developed and maintained by the Capacity Enhancement Program, Canadian Partnership Against Cancer.

The Assessment of Multiple Systematic Reviews (AMSTAR) measurement tool was used to assess the methodological quality of the systematic review, because the tool has been demonstrated to be both reliable and valid.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

The following research questions were used to develop this guideline:

In colorectal cancer (CRC) survivors (adult patients who have completed primary treatment for stage II or III CRC and who are without evidence of disease):

1. Which evaluations (e.g., colonoscopy, computed tomography [CT], carcinoembryonic antigen [CEA], liver function, complete blood count [CBC], chest x-ray, history, physical exam) should be performed for surveillance for recurrence of cancer?
2. What is a reasonable frequency of these evaluations for surveillance?
3. Which symptoms and/or signs potentially signify a recurrence of CRC and warrant investigation?

4. What are the common and/or significant long-term and late effects of CRC treatment?
5. On what secondary prevention measures should CRC survivors be counselled?
6. Are there preferred models of follow-up care in Ontario, i.e., should patient follow-up be done by a medical oncologist, radiation oncologist, surgeon, advanced practice nurse, physician assistant, or primary care provider (e.g., family physician, nurse practitioner, family practice nurse)?

The Evidence-based Series (EBS) guidelines developed by the Program in Evidence-Based Care, Cancer Care Ontario (PEBC, CCO) use the methods of the Practice Guidelines Development Cycle. For this project, the Colorectal Cancer Survivorship Working Group was aware that there are a number of national and international groups that have developed high-quality guidelines on the topic of follow up after curative resection of CRC. Therefore, the core methodology used to develop the evidentiary base was the systematic review of practice guidelines. Evidence was selected by one methodologist and reviewed directly by three members of the Working Group. A broad range of health professionals such as primary care physicians, radiologists and other imaging professionals, medical oncologists, radiation oncologists, surgeons, and nurses/nurse practitioners was given the opportunity to review the guideline and provide input in order to develop consensus.

The systematic review is a convenient and up-to-date source of the best available evidence on follow-up, surveillance, and secondary prevention protocols for CRC survivors. The body of evidence in this review is primarily comprised of clinical practice guidelines. That evidence forms the basis of the recommendations developed by the Working Group and published in Section 1 of the original guideline document. The systematic review and companion recommendations are intended to promote evidence-based practice in Ontario, Canada.

Colorectal Cancer Survivorship Guideline Development Group (GDG) Review

The members of the CRC Survivorship GDG that constitute the Expert Panel reviewed the draft EBS report simultaneously with the Report Approval Panel's review.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Report Approval Panel Review and Approval

Prior to the submission of this Evidence-based Series (EBS) draft report for External Review, the report was reviewed and approved by two members of the Program in Evidence-based Care (PEBC) Report Approval Panel, a panel that includes oncologists and whose members have clinical and methodological expertise.

External Review by Ontario Clinicians and Other Experts

The PEBC external review process is two-pronged and includes a targeted peer review that is intended to obtain direct feedback on the draft report from a small number of specified content experts and a professional consultation that is intended to facilitate dissemination of the final guidance report to Ontario practitioners.

Following the review and discussion of Section 1: Recommendations and Section 2: Evidentiary Base of this EBS and the review and approval of the report by the PEBC Report Approval Panel, the Colorectal Cancer (CRC) Survivors Guideline Development Group (GDG) circulated Sections 1 and 2 to external review participants for review and feedback.

Methods

Targeted Peer Review: During the guideline development process, seven targeted peer reviewers from Ontario considered to be clinical and/or methodological experts on the topic were identified by the working group. Several weeks prior to completion of the draft report, the nominees were contacted by email and asked to serve as reviewers. Four reviewers agreed and the draft report and a questionnaire were sent via email for their review. The questionnaire consisted of items evaluating the methods, results, and interpretive summary used to inform the draft recommendations and whether the draft recommendations should be approved as a guideline. Written comments were invited. The questionnaire and draft document were sent out on November 8, 2011. Follow-up reminders were sent at two weeks (email) and at four weeks (telephone call). The CRC Survivors working group reviewed the results of the survey.

Professional Consultation: Feedback was obtained through a brief online survey of health care professionals who are the intended users of the guideline. All individuals in the PEBC database with an interest in Primary Care and in either gastrointestinal cancer or colonoscopy were contacted by email to inform them of the survey. A total of 439 individuals were contacted. Participants were asked to rate the overall quality of the guideline (Section 1 in the original guideline document) and whether they would use and/or recommend it. Written comments were invited. Participants were contacted by email and directed to the survey website where they were provided with access to the survey, the guideline recommendations (Section 1 in the original guideline document) and the evidentiary base (Section 2 in the original guideline document). The notification email was sent on November 8, 2011. The consultation period ended on December 15, 2011. The CRC Survivors working group reviewed the results of the survey.

Conclusion

This EBS report reflects the integration of feedback obtained through the external review process with final approval given by the CRC Survivors GDG and the Report Approval Panel of the PEBC.

Gastrointestinal Cancer Disease Site Group (GI DSG) Endorsement Vote

Simultaneously with the external review of this EBS draft report, the report was circulated to the GI DSG of the PEBC. In October 2011 the GI DSG was asked to vote on whether or not they endorse this EBS. On two separate occasions, an email of the ballot question and ballot were sent to the entire GI DSG membership. At that time the GI DSG consisted of 27 members comprised of medical oncologists, radiation oncologists, surgeons, and a community representative. Prior to the commencement of the endorsement vote, the DSG co-chairs set a minimum threshold for endorsement of a majority of voting members plus one. A total of seven eligible ballots were cast. Of those, four members voted in favour of endorsement of this EBS, one member voted against endorsement, one member did not specify yes or no, and there was one abstention. The results of this vote were discussed at a GI DSG meeting on December 6, 2011. Refer to Section 3 of the original guideline document for additional details.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The recommendations are supported by clinical practice guidelines and systematic reviews.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- Facilitation of different models of survivorship care by having a guidance document with which any clinician (e.g., non-specialist physician, advanced practice nurse) is able to provide follow-up care to survivors of colorectal cancer (CRC)
- Development of standards for overuse and underuse against which practice can be measured and reported
- The evidence suggests that when colon cancer survivors were followed by a community-based family physician, there were no significant differences for rates of recurrence; time-to-detection of recurrence; death rates; or physical, psychosocial or quality-of-life components compared to survivors who were followed by an institutional-based specialist. This finding can reasonably be applied to both colon and rectal cancer populations as the follow-up care trajectories are very similar. The working group was unable to find comparative studies investigating the role of nurse-coordinated follow-up of CRC cancer survivors. The recommendation that CRC cancer survivors may be

followed by nurses is based on the success of nurse-coordinated follow-up of breast cancer survivors and on the similarity in the follow-up care trajectory between CRC and breast cancers, in settings where guideline recommended visits and testing can be organized by physicians or nurses within the institutional setting.

Potential Harms

Underuse and overuse of diagnostic testing

Qualifying Statements

Qualifying Statements

Which Evaluations Should Be Performed for Colorectal Cancer (CRC) Survivors for Surveillance for Recurrence of Cancer?

How Often Should CRC Survivors Undergo Evaluation for Surveillance?

- A complete blood count (CBC) and other routine blood work, aside from a carcinoembryonic antigen (CEA), are not recommended for routine surveillance.
- A Fecal Occult Blood Test (FOBT) is not recommended for routine surveillance.
- If local resources and/or patient preference preclude the use of computed tomography (CT), an ultrasound (US) can be substituted for the CT of the abdomen and pelvis and a chest x-ray can be substituted for the chest CT. Every six to 12 months for three years and then yearly for years four and five is a reasonable schedule for these tests.
- If a complete colonoscopy was not performed in the course of diagnosis and staging (e.g., due to obstruction) the included guidelines consistently state that one should be done within six months of completing primary therapy.

Care has been taken in the preparation of the information contained in this report. Nonetheless, any person seeking to apply or consult the report is expected to use independent medical judgment in the context of individual clinical circumstances or seek out the supervision of a qualified clinician. Cancer Care Ontario makes no representation or guarantees of any kind whatsoever regarding the report content or use or application and disclaims any responsibility for its application or use in any way.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Timeliness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Feb 3

Guideline Developer(s)

Program in Evidence-based Care - State/Local Government Agency [Non-U.S.]

Guideline Developer Comment

The Program in Evidence-based Care (PEBC) is a Province of Ontario initiative sponsored by Cancer Care Ontario and the Ontario Ministry of Health and Long-Term Care.

Source(s) of Funding

The Program in Evidence-Based Care (PEBC) is a provincial initiative of Cancer Care Ontario supported by the Ontario Ministry of Health and Long-Term Care. All work produced by the PEBC is editorially independent from the Ontario Ministry of Health and Long-Term Care.

Guideline Committee

Colorectal Cancer Survivorship Guideline Development Group

Composition of Group That Authored the Guideline

Working Group: Dr. Craig Earle (*Lead author and Chair of Colorectal Cancer Survivors Guideline Development Group*), Medical oncologist, Odette Cancer Centre at Sunnybrook Health Sciences Centre, Senior scientist, Institute for Clinical Evaluative Sciences; Dr. Rob Annis, Family physician, Southwest Regional Primary Care Lead, Cancer Care Ontario; Dr. Jonathan Sussman, Radiation oncologist, Juravinski Cancer Centre; Mr. Adam Haynes, Research coordinator, Program in Evidence-based Care, Cancer Care Ontario; Mr. Afshin Vafaei, Research coordinator, Program in Evidence-based Care, Cancer Care Ontario

Expert Panel: Dr. Cheryl Levitt, Family physician, Provincial Primary Care Lead, Cancer Care Ontario; Dr. Julian Dobranowski, Radiologist, Provincial Medical Imaging Lead, Cancer Care Ontario; Ms. Audrey Friedman, Director of Cancer Patient Education and Survivorship, Princess Margaret Hospital, Provincial Head Patient Education, Cancer Care Ontario; Dr. Christopher Booth, Medical oncologist, Cancer Centre of

Southeastern Ontario; Dr. Heather McLean, Family physician, North West Regional Primary Care Lead, Cancer Care Ontario; Dr. Andy Smith, Surgical oncologist, Sunnybrook Health Sciences Centre; Ms. Esther Green, Nurse, Program Head, Nursing and Psychosocial Oncology, Cancer Care Ontario; Dr. Amanda Hey, Family physician, North East Regional Primary Care Lead, Cancer Care Ontario; Dr. Raimond Wong, Radiation oncologist, Juravinski Cancer Centre

Financial Disclosures/Conflicts of Interest

In accordance with the Program in Evidence-based Care (PEBC) Conflict of Interest (COI) Policy, the guideline authors, colorectal cancer (CRC) Survivorship Guideline Development Group (GDG) members, and internal and external reviewers were asked to disclose potential conflicts of interest.

All authors (CE, RA, JS, AEH, and AV) reported that they had no conflicts of interest.

For the Expert Panel (CRC Survivorship GDG), six members (EG, AF, CL, JD, AH, HM) declared that they had no conflicts of interest. One member (CB) declared involvement as a principal investigator of a National Cancer Institute of Canada Clinical Trials Group randomized controlled trial (RCT) of exercise in CRC survivors and that he had published on this topic within the last five years. One members (RW) declared that he had received a principal investigator grant from Novartis for a CRC survivorship project. One member (AS) received support from Sanofi in developing a diagnostic assessment research program and also reported that he had managerial responsibility for a department that has received $5,000 or more in a single year from a relevant business entity.

All internal reviewers (PEBC Report Approval Panel members) reported that they had no conflicts of interest.

All external targeted peer reviewers reported that they had no conflicts of interest.

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Please visit the Cancer Care Ontario Web site for details on any new evidence that has emerged and implications to the guidelines.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the Cancer Care Ontario Web site.

Availability of Companion Documents

The following is available:

> Program in evidence-based care handbook. Toronto (ON): Cancer Care Ontario (CCO); 2011. 15 p. Available in Portable Document Format (PDF) from the Cancer Care Ontario Web site.

Patient Resources

None available

NGC Status

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